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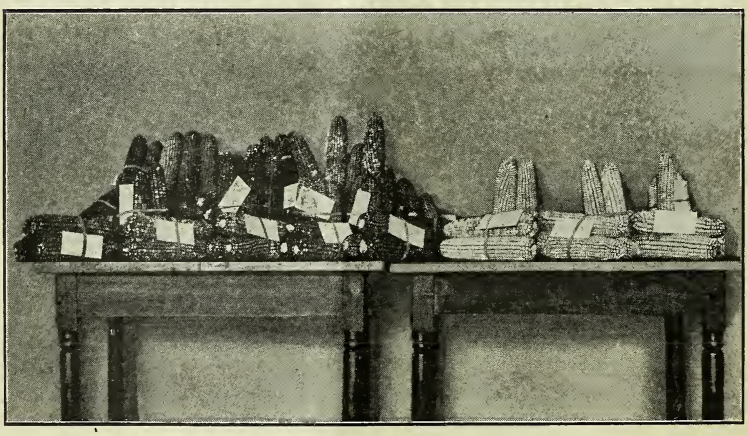

Samples of Corn Grown by Members of the Club.

SOME RESULTS OF AGRICULTURAL CLUB WORK IN THE RURAL SCHOOLS OF CLARKE COUNTY, OHIO.

THE AGRICULTURAL STUDENT.

VOL. X. OHIO STATE UNIVERSITY, COLUMBUS, APRIL, 1904. NO. 7.

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EDITORIAT CHAT.

We are just in receipt of the first edition of the Missouri Agricultural College Farmer, which, as the name suggests, is a publication of the students of the Missouri College of Agriculture. The avowed intention is to bring the farmer into closer touch with the college and to carry its teachings to the people of the state. The plan for doing this is in some ways unique; for instance, one plan is to make up articles from the notes taken at lectures, filling in and rounding out the subject from reference books if necessary. The publication is strikingly different from most agricultural college publications in general make-up, in that it is of farm paper size and appearance. The tone of the reading matter is excellent and the periodical will undoubtedly fill a most important place in Missouri's agricultural development. We extend most hearty greetings to the new publication.

The University appropriation bill fixing the levy for the next two years at 15 hundredths of a mill, has been passed by the legislature with very little opposition on the final vote. The

Woodburn bill appropriating money derived under this levy was likewise passed, and by virtue of this action the University is assured of an income sufficient for running expenses for the next two years. Considerable opposition existed to these measures, mainly on the part of those interested in other institutions who objected to the development of the Arts College in competition with their own. Ample time was allowed, however, for thorough discussion of both sides of the question, with the result that direct opposition was only slightly in evidence when the vote came. This appropriation carries only sufficient money for maintenance, and if the University is to make any marked advancement more support is necessary. The burning of the Chemical Building will also necessitate the expenditure of a considerable sum in its replacement. Another asking will therefore be made of the legislature for funds for buildings and equipment. Just how this will be apportioned or what the total amount shall be has not yet been made public. It is admitted, however, that the College of Agriculture has most important needs, needs that can no longer be disregarded, and it is sincerely hoped that it will receive its just portion in this final allotment.

The organization of an agricultural club among the students of the College of Agriculture is a distinct step in advance and the promoters of the enterprise are deserving of commendation in their efforts in this particular field.

The club idea is not new in the college, for the present literary society when founded was really of this nature. In time, however, it came to conform more and more to the character of a literary society until its doors were finally opened to any student of the University who wished to join and it became technically a literary society; and while its programs still savor strongly of agriculture. it is in no sense an agricultural club. The new organization therefore has a clear field, and a most laudable object, that of bringing the students together regularly for the consideration of matters of common interest as agriculturists.

The idea is entirely original with the students and thus is a very good indication of the advancement the college is making. There is abundant room for both a literary society and an agricultural club among the students, in fact both are demanded if the students receive the proper training. The club is, therefore, undoubtedly destined to fill a most important place in the development of the college, and in the training of its students and the field of work upon which such a club may profitably enter as time goes on are many. Judging from the enthusiasm of the promoters and the evident possibilities of such an organization, a bright future may be predicted.

We took occasion in our last issue to comment upon the recent remarkable growth of the work of the Agricultural Student Union and especially to commend the efforts of Mr. L. H. Goddard in this connection. Mr. Goddard takes exceptions to our statements in that too much credit was given him in the development of this work, and that to several others as much as to him should the credit be given. We had no thought of discrediting the efforts of others who have responded nobly in the attempt to push the Union to success, but we believe that it was in large measure the effervescent enthusiasm and untiring energy of the above named gentleman that gave the results. Others have

toiled hard, especially in routine and detail work, and for this deserve unstinted praise, but Mr. Goddard gave greatest aid in getting the matter before the people.

New Agricultural Club.

A new agricultural club has been formed at the University. It's organiza- is the outcome of a meeting of the agricultural students, held recently in the live stock judging room of Townshend Hall, to decide what should be done concerning a communication from the Agricultural Club of Illinois.

Since the Townshend Agricultural Society became a literary society, the college has been without an organization where agricultural topics could be discussed. Clubs of other colleges would send in communications and as there was no club the matter would be referred to the literary society, which really had no power to act in that respect. An agricultural club was therefore a necessity.

The main object of the club as set forth in its constitution is to supplement the present work; first, by encouraging original research among its members and reporting their work at the meetings, and, second, by bringing to the University from time to time men who are recognized leaders in agricultural work, for a series of lectures.

This club does not propose to interfere with the present literary society, but will confine its work entirely to technical agriculture in its various phases. The club already has a large membership and is sure to be a great success.

The plan of organizing such a club originated entirely with the students and a very great interest is being shown in its establishment. It goes to show that there is an increasing interest and enthusiasm among the students regarding their work and establishes the fact that Ohio's agricultural students are wide-awake and energetic. There have been complaints from time to time regarding the lethargic condition of many students, especially in their relations to the Agricultural Student Union, and other agricultural enterprises. The formation of this club with its large number of enthusiastic students is the best indication of the increasing interest among the students in all things agricultural. The enthusiasm that is being displayed almost insures the success of this organization.

Ohio Forestry.

In the history of our country Ohio has always held a prominent position in the production of timber and timber products. At present much alarm is felt lest the state lose this position on account of the rapid destruction of the timber supply.

In the past the object seems to have been to strip the land of its forest covering regardless of the probable value of the land for cultivation. Thousands and thousands of acres have been cleared that either because of infertility or on account of the topography of the land are not in the least adapted for the production of crops in competition with tracts more favorably situated. Thousands of acres of such lands are not paying taxes under the present conditions, yet the owners prefer to cultivate these lands at a positive loss rather than to plant them to forest which in the course of a few years would bring a very handsome income for the amount of capital invested.

At present Ohio has some ninety-three hundred square miles in forest, ac-

cording to the returns of the various tax assessors throughout the state. This figure is in all probability too large, as this figure includes much pasture which has only a few scattered trees, yet which is classed with woodland. Here let us say a word against the altogether too common practice of pasturing the woodland with horses, cattle, etc. It would be just as sensible to expect a second crop of wheat off ground without reseeding as to expect a forest to last if all the young trees are allowed to be destroyed by the browsing of animals. If the forest is pastured the present generation of trees must, through natural agencies, pass away, and there being no new generation coming on to replace it, the forest must of necessity disappear. Off the ninety-three hundred square miles of forest area in the state nearly one billion feet, board measure, were cut in 1901. When it is borne in mind that the average number of feet per acre will not in all probability exceed five thousand it will readily be seen that the supply will at the present rate be exhausted in less than a quarter of a century. Such facts as these furnish food for sober thought. Are we going to rush deliberately on making no provision for future generations?

In the past very little has been done to prevent this reckless destruction of our forests. No one objects to the conservative lumbering practiced by our most conservative foresters. It is perfectly right and proper that we should utilize lumber. What all true friends of forestry object to, is the reckless and wanton destruction of forests when there is no legitimate excuse for it.

In the past we have had very little legislation in favor of systematic forestry in this state. In 1805 fire laws were passed. The aim of these laws was to prevent forest fires, at that time very common and very destructive, and for the most part caused by carelessness of hunters and travelers. In 1885 the State Forestry bureau was created, its object being to promote the planting and care of forests. It has long since ceased to be active. In 1903 the Cincinnati Forestry and Improvement Association was organized. Its aims and objects are practically the same as those of the old State Forestry Bureau.

On December 11th last at Delaware the Ohio State Forestry Society was organized. The object of the society is to develop a general interest in forestry by disseminating knowledge of trees and tree planting; by encouraging the preservation and improvement of existing forests and woodlands; by inciting the more general use of trees for shelter, shade and ornament, and the growing of trees as a farm crop. The society aims to work in co-operation with the United States Bureau of Forestry and the American Forestry Association. The vast benefit of such organizations to the commonwealth is undisputed. It is to be hoped that such organizations will find a most hearty support from the public at large.

During the last two months there has been an unusual amount of interest taken in forestry in this state. In his first message to the General Assembly, Governor Herrick made the following statement: "It is evident that the State of Ohio should awake to the benefits to be derived in replacing to some extent at least the trees and forests that have disappeared.

"In some of the states of the Union legislatures have wisely provided for the protection of forests and woods. I commend the subject to your serious consideration to see if some means cannot be devised whereby the growth of timber may be encouraged not only for

the profit arising from the growing of timber, but for the purpose of preserving our water supplies, protecting ourselves from disasters of flood and maintaining climatic conditions which are in some degree dependent upon our forests."

Acting in accordance with these suggestions the Ohio State Forestry Society has through a committee drafted a bill which is now before the General Assembly that provides for the appointment of a State Forestry Board to consist of three members. This board has the power to purchase land for a forest reserve, at a price not to exceed ten dollars per acre. It is the idea to purchase tracts of land of little or no value for farming purposes and devote it to systematic forestry which in the course of time would become sources of revenue to the state. The bill also offers a premium to those who shall plant trees and care for them according to the specifications of the State Board of Forestry. It is to be earnestly hoped that the bill will pass as it will tend to a large degree to correct the deplorable state of our forests at the present time.

J. H. B.

Agricultural Clubs in Rural Schools.

A second bulletin on Rural School Agriculture has just been issued by the University entitled, "Agricultural Clubs in Rural Schools." The bulletin is meant to follow the one previously issued with reference to agricultural clubs and to suggest ways and means for the organization and management of such clubs to the best advantage. The club idea has been received with much enthusiasm by the teachers of the state and many inquiries have been received as to the methods of organizing and conducting such clubs in rural schools. It is to meet this demand for information and to give the idea definiteness that this bulletin has been issued. Copies may be obtained on application to the Dean of the College of Agriculture and it is hoped that all interested will secure copies at once so that where it is found feasible the work may be started this spring.

This is a line of work which strikes directly to the foundation of our educational system. No more potent power for giving the proper prospective to the children of our rural schools exists than that which seeks to elevate their ideas of country life to give them an interest in their surroundings and to enlarge their powers of observation. Rural school clubs have been very successful in other states and it is believed that the same conditions obtain in Ohio. In this rapid advancement of agriculture and in the methods of agricultural education, the value of proper instruction in our rural schools is rapidly coming to be properly appreciated.

Death of Professor Mesloh.

Charles Walter Mesloh, Associate Professor of Germanic Languages, died at his home on the morning of March 15. He has been subjected to extremely heavy work since the death of Professor Eggers last spring, resulting finally in a nervous collapse which caused his death.

He received his education at this University, taking his A. B. degree in 1889 and his M. A. in 1895. He spent the year of 93-4 at the University of Chicago and the years 1896 and 1897 at the the University of Berlin. He was assistant in German at the Ohio State University from 1889 to 1895 and was Associate Professor from 1895 until the

time of his death. He leaves a wife and four children, together with many friends to mourn his loss. He was a conscientious worker and instructor throughout the entire period of his connection with the University and has left an enviable record for thorough work.

Parting Luncheon of the Short Course Dairy Students.

An exceedingly pleasant social event was participated in by the students of the Dairy School at the University lunch room Eleventh avenue and High street, on Thursday, March 10. The Dean of the Agricultural College, four of the professors and four assistants were also present.

The invitations sent out were printed on lipped milk caps and read as follows:

O. S. U.
Dairy Student
Parting Luncheon,
After Milking. March 10, 1904.
Subject of Evening's Chat: "Heading Off the Cow."
Be There!

The table had been set in the shape of the letter T, and the guests were seated shortly before 8 o'clock p. m. The menu consisted of three courses and included well-seasoned substantials, as well as the delicacies of the season. The butter and cheese used had been made by the class themselves, and it goes without saying that only University spring water was used.

During the interval between the courses of the luncheon toasts were responded to by those called upon. Mr. Wm. G. Rehl, vice-president of the O. S. U. Students' Auxiliary of the Ohio Dairymen's Association, by which the luncheon was given, acted as toastmaster.

Dean Homer C. Price, in making the initial remarks about "Heading Off the Cow," sounded the keynote for the evening. At the conclusion of the Dean's remarks that note was prolonged in ringing peals of laughter and again sounded with variations in different movements by the speakers who followed.

Dean Price's story was substantially as follows: A son comes home from a term at the dairy school, at a time when his father is breaking a kicking heifer to milk, and is asked what remedy he has learned. The son says, "Our remedy for that is to weight her behind. He at once mounts the cow and tells the father to proceed at milking. The cow kicks right on, and in a very short time the son is dislodged, but the situation is explained to the father by saying that the weight is not heavy enough and that it must be fastened. The father is next helped to get astride the hips of the cow. His legs are securely tied around her body with a rope. The cow becomes frantic, breaks loose and dashes out of the open stable door, down the lane and to the public road. After much excitement and hilarity among those who happened to be passing along the road the cow is brought to a standstill in a neighbor's barnyard and the rope is cut to release her unwilling rider. The heading off of that cow was becoming a serious matter to that father. He told his son that he was now thoroughly convinced that a little learning is a dangerous thing and so he sent him back to take the full course.

Professor C. S. Plumb gave a graphic account of the beginnings of the Dairy Department of the University of Tennessee, at Nashville. He first met his classes in the cellar of a dilapidated farm house to give them instruction.

Professor John W. Decker commented favorably on the fact that the

dairy students had effected an organization and were maintaining it in a live manner. He told of how those who considered themselves the bright lights among the Wisconsin dairy students one year while he was there, were placed in a very awkward position, by responding to an invitation to a tea party, at Dean Henry's, the invitations having been written and sent by some wags of the class.

Professor Alfred Vivian said that he knew of a dairy student who, on reading, that to keep a cow from switching, her tail should be firmly tied to the leg, did so, and after having been dragged around the cow yard two or three times wondered whether it could have meant the cow's leg. He also told of a city belle, who on returning from a visit in the country, refused to drink milk, because, as she told the servant, she had seen them squeeze that stuff from a cow, and of another unsophisticated city lass who, when the cows were tied closely together in stalls, asked whether that was for the purpose of making them give condensed milk.

Mr. B. B. Herrick, the chief instructor in cheese-making, urged for united effort in placing Ohio cheese at the head of the list.

Student C. A. Breining, of Jersey, O., gave "Barbara Frietchie" in German dialect.

Secretary Edwin H. Russell, of Gowanda, N. Y., on behalf of the class, thanked the instructors and their assistants for their faithful and patient work with the special dairy students this season.

The toastmaster commented favorably on the fact that not a joke had been cracked, but that they had all been taken whole and no one had felt himself hurt.

The affair was most enjoyable and pronounced by every one a decided success.

Improvements of School Grounds.

A recent article in Country Life is of much interest in showing the feeling which is arising regarding nature and beauty in our every-day surroundings, and especially in the life and environment of children. The article notes the means adopted for improvement of the grounds of the Franklin school in Washington. Plans were submitted by the older students for improving the grounds, one of which was eventually followed. The children were given each a part to do in the spading, hoeing and tending of the garden and in the tending of the lawn for the purpose of holding their attention and creating interest. A previous attempt at a garden as an object lesson had failed and it was seen that to get the child interested he must himself do the work. In this the returns exceeded expectations for there was no end of interest and enthusiasm shown. After school closed the gardens were just as carefully cared for, the children acting on committees to see that nothing was neglected. It was amazing to note the manner in which the children took hold of the work and the really beautiful surroundings that can be developed by a little careful planning.

The possibilities for good that exist in such plans as these are almost unlimited, for there is no school where some such improvement cannot be made. The line of work is a most important one for our rural schools and the persistent efforts that have been made by the few who appreciate its advantages, to get the matter before the teachers have begun to bear fruit. It would seem that the schools of our own state are as well prepared for beginning such improvements as any in the United States and it is to be hoped that teachers and those in authority wil spare no efforts in bringing

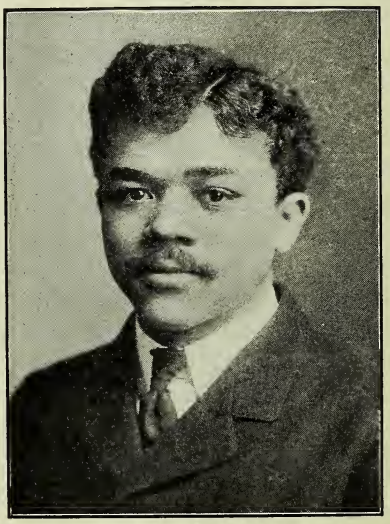
about a better realization of the possibilities inherent in the idea of the improvement of rural school grounds. This idea is of special importance in connection with the club work that is being inaugurated in various parts of the state in connection with our rural schools.

C. C. Poindexter Honored.

The many friends of Mr. C. C. Poindexter will be pleased to hear of his recent appointment as Instructor in Biology and Agricultural Chemistry, and Director of the Department of Agriculture in the Training School for Teachers at Cheyney, Pa. This school was formerly known as The Institute for Colored Youth and was established in 1837 under the management of the Society of Friends. It was operated in Philadelphia until 1902, when it was reorganized under the same management to develop a normal school, which would correlate academic and industrial education. To meet this end a farm of 117 acres was purchased at Cheyney, Pa., twenty-two miles southwest of Philadelphia, and the school moved to that site. New buildings are now being constructed and equipped and an entirely new corps of teachers is being installed.

The school is expected to fill a new field as regards schools for colored youth and a united effort is to be made to educate students who will be able to elevate education in elementary and secondary schools. The requirements for admission are about those of second-year high school work and the course is to cover three years.

In the department of which Mr. Poindexter is to have charge the aim will be to give the students who shall go as teachers into the elementary and secondary schools such training as will enable them to help parents as well as pupils. The farm will be used for farming purposes, especially as bearing upon the educational phase and a certain amount of experimental and illustrative work will be done. The aim will be to illustrate ideal farm practice and rural environment, and not to make an effort at profitable farming for the school or to train the students to be farmers.



C. C. POINDEXTER.

In the reorganization of the school the board of managers has invited the advice of such noted educators as President Gilman, of the Carnegie Institute, President Sharpless, of Haverford College, and Booker T. Washington, of Tuskegee. Hugh M. Brown, a graduate of Princeton, has been secured as principal, and the school will open September 1.

Richard Humphreys, whose bequest of $10,000 started this school under the guidance of the Society of Friends, believed in a proper corelation of the academic and industrial elements in any course of study arranged for the descendants of the African race, and it is the present intention of the board to

develop Mr. Humphrey's idea more fully. The Friends take a broad and exceedingly practical view of the educational needs of the colored people. They feel that the present conditions make it necessary that the school teacher be able to give helpful precept and practice along all lines of every-day activity and that for years to come the colored teacher will find parents' meetings a field for vital usefulness almost as important as that of his school. Further the developing influence for these meetings will be the teacher's ability to perform after the most approved and economic methods the everyday activities of housewife and husbandman.

Mr. Poindexter is particularly fitted for the position he is to fill in conection with this school. He was born in Pennsboro, W. Va., in 1880, attended the public schools of Clarksburg, and Parkersburg, was graduated from West Virginia Institute in Normal in 1896 and Academic in 1899, he was assistant teacher 1898-99, was graduated from the Commercial High School at Logansport, Ind.. in 1898, and entered the College of Agriculture at the Ohio State University in 1899, from which he was graduated in 1903. Upon the completion of his course he was appointed private secretary to Professor Hunt, which position he is still filling at Cornell University. Mr. Poindexter has done special work in biology and some important publications along this line have appeared under his name.

During the last year of his course at the University he was an active member of the staff of this publication, and the STUDENT takes particular pride in giving him this public recognition and in extending most sincere wishes for success in his new field.

Rural School Training.

No doubt every reader of THE STUDENT has heard people that were living in the country say: "I wish we could move to the city for the sake of the children's education," and we have perhaps heard it mentioned as one of the advantages of city life over country life on a farm that city schools are superior to those of the country, and that the children there stand a much better chance of getting a good education.

These ideas arise, apparently, from a misapprehension of the meaning of the word education, and a confusion of the terms education and schooling. When we remember that our greatest president had less than twelve months of schooling in his life we can see the difference in the meaning of the two terms. It must be apparent to every one, the things that seem to us hardships and trials, were the things that educated him for the great position he was destined to fill. Perhaps the very absence of schooling, as we understand it today, fitted him more perfectly for his future greatness.

But is it true that the city child is so far ahead of the country child on the farm in all that constitutes a good education? A Western educator says:

"In some respects the old-time schools were better than those of today. We surpass them in mechanical drill and methods of instruction, but in some way they reached the heart and quickened the conscience, and turned out men and women of whom the world has not been ashamed." Is it not this mechanical drill that takes away the strength of the modern city school? It takes away the originality from both teacher and pupil and institutes a sort of machine-made work which is very pleasing in appearance, but when it comes to the

wear and tear of life the pupil turned out by the old "hand-made" process comes out ahead. This I believe is where the modern country school has the advantage over the city schools; the pupils are brought into contact with nature in many different ways and their eyes are trained to see, their hands to do, and their minds to think, not in any mechanical sense, but in a true educational manner. This is the field in which our rural schools of agriculture are destined to make themselves felt. They can supply this long-felt want of providing a higher, as well as a thoroughly practical education, not schooling, for the youth of our agricultural districts, that cannot fail to have a wholesome effect upon every phase of rural life.

The student that does everything according to a certain rule without stopping to think is not only depriving himself of a large amount of pleasure in the present, but his progress throughout his whole life will be checked. The pupil that was not trained to think and observe for himself when the subjects he had to examine and to think about were comparatively simple, will not, or cannot, when he is a grown man, with problems more complex. If, then, our school instruction aims at preparing pupils for the duties of after life, how important it is that the youth of the schools should be taught to think and see for themselves. Ohio is coming to recognize these principles and the work in the schools of Clark county is an example of what may be done.

The work of these schools is based on the very lines of which we have been speaking, of training the pupils to think and do for themselves. In this they are learning lessons that will be of untold value to them in after life, no difference what line of work they may take up in after life. Let us not, then, be so eager to decry the work and opportunities of the country schools, but rather let us lend them every encouragement and make them what we know they ought to be. Ohio's school system on the whole is good, but in the matter of rural school work there is an opportunity for lasting benefit in making the instruction savor more of rural life, and in developing the child's power of observation. Such work as this will give the pupils an interest in country life and will give them a training and education that cannot fail to develop in them true manhood and womanhood, the things to be most desired in this life.

F. RUBINS.

Rural Engineering at Wisconsin.

According to a recent report by Professor W. A. Henry, of Wisconsin Agricultural College, the Department of Agricultural Engineering, which has lately been added to the college, is promising much. Mr. G. W. Knapp, a graduate of the University of Wisconsin, is its head, and it is believed that this department will supply a crying need. Farmers send in calls for assistance in planning farm barns, in planning and constructing siols in the ventilation of farm barns, in the construction of farm house, etc.

Professor Henry says: "It is our intention during the coming season to put up a building for the accommodation of the Agricultural Engineering Department. This will be planned mainly by Professor Knapp. Those who put up buildings in the city have the advantages of trained architects. The farmer has no such assistance in planning the buildings which he uses. There is perhaps not an architect in Wisconsin who can plan a practical, up-to-date farm barn. Mr. Knapp will turn his attention first

to barn plans, ventilation of farm barns and the construction of up-to-date silos. Later on he will give his attention to farm houses, and water supply for the same. Then will come the care and management of farm machinery, the construction of roads, road machinery, etc. Agricultural education is constantly broadening and becoming more and more helpful to the practical, busy farmer. It is our hope and ambition that our Department of Agricultural Engineering at the University of Wisconsin will prove of the highest utility to those it is designed to serve."

This feature of agricultural education is one which is rapidly coming into prominence and is receiving favorable consideration in all the more advanced agricultural colleges. As agriculture is reduced to a pedagogical basis the various subdivisions of this very broad subject are each receiving more and more attention. The field of the agricultural engineer is comparatively new, but the opportunities are many. Undoubtedly the near future holds a wonderful development for this particular line of work. W.

Farms for Demonstrative Purposes.

As recently noted in the Experiment Station Record the Department of Agriculture has arranged for conducting during the coming season thirty farms in the various Southern States to serve as demonstrations in farm management. These will contain from 40 to 50 acres each and be located as follows: Texas 14, Louisiana 5, Mississippi 3, Alabama 3, Georgia 2, South Carolina 2, Florida 1. They will be on private farms and will be under the direction of officers of the Bureau of Plant Industry, who will visit them frequently during the season. The department will furnish seed and one-half the fertilizer, and the expense of conducting them will be borne by the owners, who will carry on the work according to the plans prescribed by the Bureau of Plant Industry. General farm crops will be grown with reference to demonstrating the practicability and methods of diversified agriculture. W. J. Spillman, Agrostologist of the Department, is in immediate charge of the work.

The plan while unique is experimental, and the success of the undertaking remains to be determined. It is, however, an example of the efforts of the department to make their work of practical value and to come in direct contact with the farmer. It is of especial interest as being indicative of the advancement of the work of the department.

A Practical Problem.

A very practical and striking challenge has come from Mr. James Thompson, of Lanark county, Ontario.' The challenge was issued to the Dominion and Provincial Department of Agriculture, to the Experimental Farm and the Ontario Agricultural College. He says:

"We have experimental farms and their value cannot be overestimated, but we would like to see the government buy a poor farm which is run out for want of labor, and the building sadly in need of repair. Let them put a mortgage on it for half its value. Then let an expert, by good management, pay off the mortgage, principal and interest, pay for extra help, redeem the land, renew the buildings, and at the same time provide a fair income for himself. We doubt his ability to do so.

This is a practical proposition for some one and our experiment stations would do well to take it up and get the

co-operation of the agricultural colleges. Mr. Thompson does not think that it can be done, but we venture the suggestion that men other than college men are daily undertaking cases very similar and some are succeeding.

This is a good field for some one to bring honor to himself, for if it should be taken up the man who gets the work will surely be brought into prominence. Such an experiment would prove of great value, although it did not come out as successful as might be desired. The country or state first entering upon such an experiment will not only be brought into prominence, but also will be taking a great step in the agricultural experimental work. L. H. P.

The Cotton Boll Weevil.

The most serious menace that the cotton planters of the South have ever been compelled to face is the Mexican boll weevil, which is ravaging the cotton fields of Texas. The weevil has not been found outside that state except in the instance which occurred in August at the Louisiana Sugar Experiment Station at Audubon Park in the environs of New Orleans. In that case the circumstances have led the Louisiana authorities to the conviction that the pests were purposely placed in the cotton plots by some interested person. The station authorities promptly destroyed all the cotton of the experimental plots by picking the fallen fruit, uprooting and burning the plants, and subsequently plowed and flooded the land after it had been thoroughly sprayed with crude petroleum. As there are no cotton fields within ten miles of Audubon park, and several examinations by the station entomologist failed to reveal any weevils, it is very probable that the colony was completely exterminated.

The difficulties in the way of controlling the boll weevil lie as much in its habits and manner of work as in the peculiar industrial conditions involved in the production of the staple in the Southern States. The weevil lives in all stages, except the imago, within the fruit of the plant well protected from any poison that may be applied, and in that stage takes food only by inserting its beak within the substance of the plant. It is remarkably free from the attacks of parasites and diseases, occupies but fourteen days for development from egg to adult, and the progeny of a single pair in a season may reach 134,000,000 of individuals.

The weevil adaptes itself to climatic conditions to the extent that the egg stage alone in November may occupy as much time as all the immature stages together in July or August. These factors combine to make it one of the most difficult insects to control.

The steady extension of the territory affected by the weevil year by year until the northern boundary is far north of the center of cotton production in the United States has convinced all observers that it will eventually be distributed all over the cotton belt. Although its progress has been comparatively slow during the time it has been in Texas, it has displayed no tendency toward dying out.

The steps that are being taken by the United States Department of Agriculture and the bill that is before Congress to appropriate money for the extermination of this pest are most commendable. The recent success of the government in stamping out the "foot and mouth disease" of cattle in New England should give confidence and determination in this effort.

In many parts of our country farming would be impossible but for the trees, such is their influence upon the streams. They regulate the water supply, and

their tendency is to prevent both floods and drouth; they supply fuel, one of the greatest necessities of life, and they furnish the lumber for the building of our cities, railroads, ships, and a thousand other things without which our present state of civilization would not have been possible for ages, if at all. This is why we should be careful of our forests, which are fast dwindling away in many sections; this is why we should legislate against sheep-grazing in the forests, and against all other practices which tend to cause forest fires, and why we should try to protect our trees from their natural enemies, such as landslides, floods, insects and fungi. And it is well to bear in mind the fact that we cannot replace in fifty years a tree which we can destroy in an hour.—April Woman's Home Companion.

Scientific Forestry.

It is gratifying to note that the sentiment of forest conservation is taking such rapid strides in this country in the face of strong opposition by interested persons. We note with pleasure that owners of large tracts of forest lands are grasping the truth that, even from a financial point of view, the scientific management of their holdings offers many advantages over the ruthless destruction of all merchantable timber in order that its present value may be realized in dollars and cents. In fact, scientific forestry does not mean that the forest be saved from the woodman's ax; on the contrary it encourages the cutting of timber that has matured and the preserving of trees that are increasing in value from year to year.

One of the most hopeful indications of the fact that the necessity of conserving forests is beginning to be recognized by large holders of timbered lands is the fact that Frederick Weyerhauser, President of the Weyerhauser Lumber Company, and probably the holder of the largest interests in forest lands of any single man in the world, has signed an agreement with the Federal Bureau of Forestry, which has contracted to furnish working plans for the conservation and management of 1,300,000 acres of the company's lands. By this contract the Weyerhauser Company agrees to defray all the living and traveling expenses of the agents engaged in the work. Also the Northern Pacific Railroad Company has requested the bureau to prepare plans for the management of its timber land holdings in Washington and Idaho. When to these two interests are added the 62,000,000 acres of forest reserve lands which have been withdrawn from public sale by the Interior Department, it will be seen that the Bureau of Foresty will have work on hand to keep it fully employed.

When forests are properly managed, as they are in France and Germany, they yield an annual crop of valuable timber without lessening the value of the holdings. In addition to this income the forest has a beneficial influence upon the climate, conserving moisture by storing up water in the soil and preventing evaporation. They contribute to the even, natural flow of rivers by preventing the immediate rush of every rainfall to the beds of creeks and rivers. Alternating freshets and dry river beds are characteristic of a treeless country, and the soil that is thus drained rapidly and then baked by the sun's rays soon loses a greater part of its virtue as agricultural land.

It is high time that these principles were recognized by our lawmakers and forest holders. A few more years of our present system of forest management and our lumber supply will be ex-

hausted. The establishment of systematic forestry methods in the United States should no longer be delayed.

J. C. W.

A Model Farm at the St. Louis Exposition.

A model farm, representing a section of land 160 acres in extent, illustrating especially the value of the planting and the rotation of crops, will be one of the interesting and valuable exhibits provided by the United States Government at the World's Fair.

George L. Clothier, Field Assistant for the U. S. Bureau of Forestry and in charge of the cooperative tree planting, while in St. Louis submitted his plans to the Exposition officials. Mr. Clothier asked for, and will probably be allotted, a large area adjoining the six acre map of the United States that is worked out with the representative crops of the various states and territories.

The 160 acres, reduced ten times, is laid out as a model farm. The farmstead occupies the northeast corner of the site and contains 936 square rods. A model farmhouse, with model barn, stables and outbuildings are to be erected. There is an orchard, vineyard, garden, stock and poultry yards pig sties, and all the other equipments for a farmstead.

The fields are all of the same size 30 by 117 rods. Five of them run east and west and are parallel. The fifth is on the north end of the tract and with the farmstead is as long as the other five combined are wide.

Windbreaks are planted on the south and west sides of the entire farm. The windbreak is placed here because the prevailing winds in Missouri and Kansas come from those directions. On a farm of 160 acres these windbreaks would be a belt of trees 89 1-2 feet thick. On the model farm at the World's Fair all of the trees best adapted for the purpose will be shown. On the bottom land the best trees are cottonwood and box elder. On the uplands ash and osage orange make good windbreak. Russian mulberry and white elm or hackberry, with ash or Russian wild olive prove very effective. All of the various combinations will be shown in the World's Fair windbreaks. The young trees for these windbreaks are not planted irregularly, but are set out in squares like corn and are cultivated.

The fences between the fields, too, are exhibits of forestry. Trees will be planted at regular intervals and the wire fencing will be thus nailed to live posts. This will demonstrate economy both in space covered and in the cost of building. In addition to their uses as live fence posts these rows of trees constitute subsidiary windbreaks. The windbreaks serve to protect the crops in the fields. The shade they cast conserves the moisture in the soil and serves the farmer in other valuable ways.

The rotation of crops as exemplified on this model farm is full of valuable and practical information. On this six-field farm Mr. Clothier has arranged for a five year rotation. On one field alfalfa will be planted, and it will be shown that this must be left for five years to obtain the best results for both the crop and the land. Another field will be planted to timothy or clover. Another will be planted to timothy and left for two years. Other fields will be planted to corn, oats and wheat, and the reason why wheat or corn should be planted in a field on which the year before clover or alfalfa grew will be practically demonstrated.

Another feature of this government exhibit, but shown outside the model

farm, will be a nursery for forest trees and evergreens. There will be beds in the open showing how forest trees are grown from seed, and other beds covered with lath affording the necessary shade for the growth and cultivation of evergreens.

DAIRY NOTES.

The success of the dairy school in placing its men in desirable positions has this year been very marked. The following men have accepted positions:

W. G. Van Meter goes to Braddock, Pa., as superintendent of a large pure milk plant.

Samuel Arney will make butter for J. E. White at Greenfield, O.

Floyd Bartholemew has accepted a position with a large creamery at Garrettsville, O.

Arthur Beer goes to Stowe, O., as a creamery superintendent.

C. A. Breinig will make cheese for H. F. Hudson at Windham, O.

F. R. Hackman will go with D. A. Crowner's creamery at West Jefferson, O.

Clarence Hoskyns will be stationed in a creamery at Wilmington, O.

Wesley Netz will make butter at Petteysville, O.

W. G. Rehl will operate a 400 acre dairy farm near Zanesville, O.

E. H. Russell will make cheese at Lorain, O.

John W. Parkinson will make cheese for B. B. Herrick at Wellington, O.

P. P. Sagar will operate a skimming station at Jersey, O.

J. H. Seacrist will operate a new creamery at Hagerman, O.

M. A. Smith will make cheese at Tiskihoa, Ill.

C. J. Smith will make butter at Eaton, O.

Clifton Weaver has accepted a position with the Summit Station Creamery.

M. L. Woolcut will operate a skimming station for French Bros. at Blueball, O.

W. D. Sims will make butter at Worthington, O.

Chas. H. Pettit will make butter at Trotwood, O.

Howard Sherman, who has been with the Sunbury Creamery for three years, has been transferred to their main plant.

UNIVERSITY NEWS.

A. S. Neale, '05, has been appointed to complete the year in the position of Farm Superintendent, left vacant by the resignation of Frank Ruhlen.

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The burning of the Chemical Building has caused great inconvenience in the class work of the Department of Chemistry. The various classes have been distributed about in the other buildings and temporary laboratories are being equipped. For the latter purpose, a special appropriation of $15,000 was recently made by the legislature. Townshend Hall has become headquarters for the department, the store-room and most of the offices being provided for in that building. The work of razing the walls of the ruined structure is going forward and the site is being cleared for a new sructure. It is expected that in the rebuilding the Department of Mining and Ceramics will be given a separate building.

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The girls of the University are rapidly coming to the front. During the past two months a Girls' Athletic Association and a Girls' Glee Club have been organized, both of which give promise of being permanent organizations. The

Glee Club gave a concert on the evening of March 9, which in originality and execution surpassed anything that has been rendered in the chapel in years.

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The track team was crushingly defeated by the Indiana team on February 27, the score standing 66½ to 18½. The cause of the defeat is attributed to the superior training of the Indiana men.

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The debating teams met West Virginia and Oberlin on the same date, February 26, to debate the question: Resolved, That the municipal ownership of public utilities is undesirable. We won from West Virginia unanimously and lost to Oberlin 2 to 1.

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The Junior prom was held in the Gymnasium on the night of March 4. It was the most elaborate and successful function of that nature ever held at the University.

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The University dramatic club, "The Strollers," will make its second appearance of the year on the evening of April 8, when it will present "Sweet Lavender."

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Messrs. E. L. Zehring, T. L. Wheeler and Otto Eckman leave for Washington the first of the month to fill their positions in the Bureau of Soils.

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The soils laboratory is being rearranged to accommodate the students in analytical chemistry for the coming year or until the new chemical building is finished. The desks are being planned for the work in soils, but incidentally to accommodate the chemistry students also for the time being, thus allowing the temporary arrangement to become a permanent improvement.

At a recent auction sale a large amount of the old farm implements and machinery of the farm was disposed of and new and improved models are being substituted. An effort is being made to give the grounds about the barns a more pleasing appearance.

* * *

The close of the Dairy School marks a most successful term for this department of the work of the college. The class of students in attendance this year was considerably above the average and most careful work was done. Almost every member of the class has been placed in a creamery or cheese factory for the coming year.

ALUMNI NOTES.

A. E. Day, O. S. U. 1902, is engaged in truck farming at McNeill, Miss. He has purchased land in that region and is marketing. He was formerly engaged in the same work on his father's farm at Mt. Carmel, O.

Merritt Harper, O. S. U. 1901, is Assistant in Agriculture at Columbia, Mo., and is Special Agent in Grass and Forage Plant Investigation, U. S. Department of Agriculture. He is in charge of extensive cattle feeding experiments that are being carried on by the department in co-operation with the Missouri Experiment Station.

C. T. Goodwin is practicing dairy farming at Columbia Station, Ohio.

Frank E. Hamilton, 1903, is Farm Foreman and Instructor in Agriculture in Berea College, Kentucky.

Marion Imes, '99, is still engaged as U. S. Inspector of the Department of Agriculture. During the recent fight

for the control of the foot and mouth disease in New Englahd he was actively engaged in this work. He is at present located in Chicago.

A. H. Snyder, who is with the Bureau of Soils and who for the past two years has been located in Washington, has been transferred to Florida for special work.

N. P. Neill, who has been with the Bureau of Soils in the west has been transferred to Indiana.

GENERAL AGRICULTURAL NEWS.

The Iowa Agricultural College is again asking largely of the legislature. Among other items, $5,000 are asked for agricultural extension work, $5,000 for good roads experiments, $15,000 for an engineering experiment station, $6,000 for soils investigation, $6,000 for corn investigations, $75,000 for a new dairy building and plans are being made for a new agricultural building to cost $250,000.

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Professor F. H. King, Chief of the Division of Soil Management of the Bureau of Soils, has resigned to take effect June 30. He was relieved of charge of the division February 1 and is preparing a report on his investigations.

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Wellesley College is to give a course in general horticulture and elementary landscape gardening. The course includes instruction in the preparation of soils, propogation, cultivating and pruning trees, school gardens and planting designs. The lectures will be supplemented by practical work in greenhouse and field.

George C. Creelman, formerly superintendent of farmers' institutes in Ontario, has been appointed president of the Ontario Agricultural College at Guelph, to succeed Dr. Jas. Mills, resigned.

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The Cornell College of Agriculture has a bill before the New York legislature asking for $250,000 for an agricultural building. It seems, however, that it is meeting with the usual opposition at the hands of politicians and others. Recently seven presidents of smaller colleges in the state met and proposed a substitute bill which they are attempting to have enacted. It is to be deplored that a college that has done as much for the farmer and the agriculture of the country should not be allowed adequate buildings or equipment.

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The Farm Mechanics Department of the Iowa College of Agriculture has planned a series of lectures on various implements by men associated with their manufacture. That new department has already enrolled 125 students and a number who are taking post-graduate work.

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It is reported that Cobra George Salem, an Egyptian, who entered Missouri Agricultural College last fall and is taking the four-year coure in agriculture, is so well pleased with his work that he has succeeded in persuading several of his friends in Egypt and Turkey to come and take a similar course.

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A small area of the Ontario Agricultural College farm has lately been set apart as a forest nursery, where trees suitable for planting will be grown. The seed will be sown soon and it is expected that the trees will be ready to transplant

in from two to three years. An educational campaign will be conducted to instruct farmers just how to go about replenishing the denuded forest country.

* * *

The following have accepted positions on the permanent staff of the Station for Experimental Evolution of the Carnegie Institution, at Cold Spring Harbor: Professor C. B. Davenport, who will serve as director; Mr. Frank E. Lutz, who will make quantitative studies in animal variation; Mr. George H. Shull, whose work will be largely in plant breeding and the study of mutations in nature, and Miss Anne M. Lutz, who will serve as recorder and cytologist. The plans of the new building are now in the hands of the architects, Messrs. Kirby, Petit & Green, of New York City, and construction will commence as soon as the frost is out of the ground, so that the building may be in use next summer.

* * *

The University of Michigan has received from Arthur Hill, of Saginaw, 80 acres of land just outside of Ann Arbor, to serve as an experiment farm for the Forestry Department. The tract is called "The Saginaw Forest Farm." The tract is to serve as an object lesson in forestry and is planned to provide for: (1) An arboretum of all useful forest trees suited to Michigan. (2) Demonstration areas for seed-bed and nursery work. (3) Model plantations of forest trees. (4) Special experiments in forestry such as the various methods of propagation of special kinds of timber and the raising of particular kinds of forest products, as well as for other practical purposes.

A "Farmers" Grain and Live Stock Commission Company has been incorporated under the laws of South Dakota, with capitalization of $100,000,000. The company proposes to do the buying and selling for farmers who are stockholders, giving them better markets and eliminating the middle man.

We wish to secure good livestock men to interest themselves in the sale of Zenoleum. To those who can show plenty of good business for famous Zenoleum Dip and Disinfectant, we will offer a proposition that is sure to be interesting and profitable. Address for particulars, at once, Zenner Disinfectant Co., 87 Bates St., Detroit, Mich.

March 2, 1904.

Agricultural Student, O. S. U., City:

Gentlemen:—There never has been a season in our experience when the demand has been so great and when we have sold so many stallions as we are selling now. Our phenomenal success is due in a large measure to inquiries that we received from those who say they saw our ad. in your valuable paper.

Mr. James B. McLaughlin will arrive in France early this week, where he will buy every good Percheron and French Coach stallion that he can find. He is the only American importer who can speak the French language; all others require the services of interpreters. On account of the peculiar disposition of the French people they are much more willing to do business with one who can speak for himself and who can carry on a conversation without the aid of an interpreter of whom they are always suspicious. They have reason to be suspicious of interpreters, because they have the well-established reputation of taking every possible advantage both of the buyer and the seller and the interpreter's profit frequently is larger than that of any one else connected with the horse importing business.

We constantly keep a large number of the very best stallions at our stables in St. Paul, Kansas City and Columbus. Yours very truly,

McLAUGHLIN BROS.